In a Remote B.C. Valley Scientists Will Probe

Secrets of the SUN

Story and Picture by
GWEN CASH

SHOULD THE CYNIC Diogenes return to earth still looking by the light of his pre-Christian lantern for an honest man he'd need go no farther than Saanich Astrophysical Observatory There, at least for several months, he'll find P. Edward Argyle, who has earned the reputation of saying exactly what he feels is the truth without fear or favor at PTA meetings as well as to enquiring reporters.

That he'll be at the observatory at Saanich no more than a few months longer is because he's to be one of four highly rated technical officers and the only British Columbian who will soon man the lonely radio observatory ringed about with mountains at remote White Lake, 15 miles from Penticton. There they'll listen to mysterious frying-sausage noises that come from the sun and try to discover more about the galaxy of stars in which the earth moves.

A physicist who refuses to admit he is more than ordinary run of the mill, though his record shows otherwise, Mr. Argyle is 40 years old, looks as much like a well-turned-out club man as a scientist. Married, with two young daughters, he can be devastatingly and provocatively honest in a world more and more given over to public relations men with "slants."

"Tell ..bout these sun noises?" I said.

"In 1932 a fellow named Jansky studying interference to trans-Atlantic radio communications by static for the Bell Telephone Company, stumbled on an unexpected fundamental discovery," he said. "This was that there are extra-terrestrial sources of radio waves and that certain kinds of static came from the sun."

As radio receivers in those days were far less sensitive than they are today, nothing further could be done about sun noises at that time, Mr. Argyle told me.

Then, during the Second World War, radar waves in England showed interference. At first it was feared this interference came from a German secret weapon and gave rise to all sorts of rumors. Later scientists realized it came from the same source Jansky had discovered and filed information about in 1932.

Last year on his way back from Russia, where he'd been attending the International Astronomical Conference, Edward Argyle stopped off at Jodrell Bank, of which Professor A. B. Lovell, currently speaking over CBC on the amazing world in which men like Mr. Argyle move and think, is director.

It's a world that stretches your mind to unbelievable limits. A world in which man travels easily in space; one in which hydrogen fusion will replace hydro-electric power, bio-chemists discover the secret of life and computor machines think.

"Do you believe all this?" I asked Edward Argyle. "Isn't it just science fiction?"

"All this and more," he said. "There has never been any doubt in my mind that man would travel in space. I'm only sorry I was born too soon to do it."

"What about the secret of life? What do you mean by that?" I asked.

"Biochemists are on the eve of understanding the physical and chemical processes that are necessary to life. This is a step towards making a living cell."

"A cell like an amoeba?" I asked

"Much simpler than that," he said, "An amoeba is really quite a complex organism."

I passed up hydrogen fusion but the computer thing had me really worried. "I have a young cousin working with one in Ottawa," I told him. "If the scientists can teach the beastly things to think as well as multiply and divide, they might write articles, books, and in time I and others like me might be done out of a job."

"Conceivably," he grinned. "They can already translate one language into another. Clumsily, I admit, but understandably. But as I believe all processes in the universe are natural I don't see why, in view of the continuing advance of the sciences, computer machines won't in time write books."

I shuddered. "Horrible!"

"Nonsense," said Edward Argyle briskly. "Science is man's servant, not his master."

P. EDWARD ARGYLE

Born one of four brainy sons to English emigrants who were never prosperous, and educated in the public schools of Creston in the Kootenays, Edward was already married—to a school teacher—and working as a radio repair man when the Second World War broke out.

"The soldier's educational grant gave me my opportunity," he told me.

Discharged as a sergeant from Signals, he majored in physics, got his BA, MA at U.B.C., did six years' work in five and then joined the staff of the observatory at Saanich.

"Why was White Lake chosen for Canada's radio observatory?" I asked.

"We had to find some place where man-made radio and TV signals wouldn't interfere with those from space," he said. "Optical observatories have to be built on hilltops to get above clouds and smoke. Radio observatories need to be dead spots in valleys surrounded by mountains."

Dr. J. L. Locke of Ottawa will be in charge of the White Lake station. He and Mr. Argyle looked at 30 potential sites before deciding on White Lake. With a truck and scientific equipment they also visited two United States radio observatories; one at Greenbank, West Viriginia, the other at Bishop, California.

"The West Virginia observatory was in a pleasant agricultural valley," said Mr. Argyle. "The one in California deep in the Sierra Nevada Mountains. Ours, I think, will be quieter than either of these."

"What does the station consist of?" I asked.

He drew a rough sketch of a great parabolic dish-like receiver, 84 feet in diameter on a pedestal that could be swivelled about to point to any part of the sky. With interlacing pencil lines he showed me how radio noises from the sun bounced onto the dish-like receiver then back again at an antenna supported by an aluminum grid structure. A control room for scientific observation is connected with this equipment.

There is also a workshop, a janitor's house and a small staff dwelling. The scientists will live in Penticton, commute daily to White Lake.

Two years ago Mr. Argyle spent a month in Ottawa helping build the equipment for White Lake. Last November he laid down an accurate north-south line so that the contractors building the observatory would correctly orient the apparatus that had to follow the stars across the sky.

"Do you think we have enough scientists in Canada?" I asked.

"It depends on what you want them for," he answered. "The ultimate end of civilization should be for people to get aolng with each other. But look about you. In every field save science people thinking metaphysically quarrel—in politics, family life, even among artists. The only co-operative venture we do really well is science. The International Geophysical Year was spectacularly successful. So, of course, more scientists."

Pretty soon P. Edward Argyle will be leaving for White Lake and further discoveries in the fantastic world which he figures is full of promise for a peaceful tomorrow.

SISTERS IN SERVICE

By FRANCES EBBS-CANAVAN

In a charming booklet, "City of the Rivers," issued by the Manitoba department of industry and commerce, with an introductory message by F. L. Jobin, holding the portfolio, and beautifully illustrated by Wilhelm Kauffmann, there are many fine portraits of Manitoba pioneers. Among them is one of Bishop Provencher, and a tribute to him, and to his successor, Archbishop Tache, whom we knew very well, and loved. No mention whatever is made of the Grey Nuns, "Sisters of Charity." who came in 1844 from Montreal—a journey accomplished in 50 days!

During all of the ensuing years, the Sisters have spent their long lives of prayerful industry in silent service to others.

In 1870 the First Expedition of Volunteers, under Sir Garnet Wolseley, arrived at Fort Garry. They were three months on the march—the story of their arrival is well known, and the establishment of law and order, and the first provincial government, resulted.

As long ago as 1871 a bill was before the House during the first session of the first provincial government of Manitoba, by which it was suggested that a gift of $500 be granted to Saint Boniface Hospital. This was duly debated. Some speakers thought it would be better to set aside that amount until such time as a general hospital should be established. They argued St. Boniface Hospital was a "sectarian institution," and so, not eligible for any consideration by the Government.

At last the attorney-general, H. J. Clarke, arose, and in his eloquent language, said that St. Boniface Hospital was the only hospital then in the area, and convinced his listeners that it was used for the benefit of the sick, regardless of religion. The Sisters were always available, when the health of any person was in jeopardy. He said that the Sisters had gone by Red River carts to visit patients in their own homes, throughout the settlement; 6,000 such visits had been made, and this since their arrival in 1844! The Sisters never asked if the patients were suffering from a Protestant pain, or a Catholic fever! The resultant laughter may have won the day. The amount suggested was given, and devoted to the erection of a four-roomed hospital from which the present St. Boniface Hospital has evolved.